

ABSTRACT OF THE DISCLOSURE

A frequency synchronizing apparatus synchronizes the oscillation frequency of a receiving device to the oscillation frequency of a transmitting device. The
5 frequency synchronizing apparatus receives, from the transmitting device, frames in which symbols having identical time profiles have been embedded, calculates a correlation value between the identical time profile portions in neighboring frames of a receive signal,
10 obtains the phase of the correlation value (a complex number) as a frequency deviation between the transmitting device and the receiving device, and controls oscillation frequency based upon the phase.